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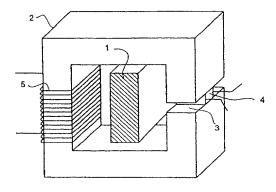
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(54) Title: METHOD FOR REPRODUCING DIRECT CURRENTS AND DIRECT CURRENT TRANSFORMERS FOR CARRYING OUT SAID METHOD

(54) Bezeichnung: VERFAHREN ZUR ABBILDUNG VON GLEICHSTRÖMEN UND GLEICHSTROMWANDLER ZUR DURCHFÜHRUNG DES VERFAHRENS

(57) Abstract

The invention relates to a method for reproducing direct currents, for use notably in direct—current switchgear, and to a direct—current transformer for carrying out said method. In low—voltage switchgear, measurement of the primary direct current should be carried out if possible within the system, i.e. without a supply of external energy from an additional energy source providing an auxiliary voltage, or at least by using only a low—output energy source. According to the above method the current signal produced by a secondary winding, which via an iron core is coupled to a primary winding through which the current to be measured passes, is integrated and the integrated current value is transmitted to a measurement device or trigger circuit of a switchgear. The integrated current value is adjusted at defined intervals. To this end the primary current to be measured is determined by a compensation method using a magnetic field sensor for measuring the magnetic field in the iron core and the integrated current



value is corrected to this value. The above method requires only a fraction of the energy of known direct-current transformers because the compensation method used is carried out only at intervals to eliminate the drift of the current value determined using the integration method.